

~~0905~~

OIPE

2
 RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/938,418

DATE: 09/13/2001
 TIME: 11:04:36

Input Set : A:\P5009R1_sequence_listing.wpd
 Output Set: N:\CRF3\09132001\I938418.raw

3 <110> APPLICANT: Ashkenazi,Avi J.
 4 Goddard,Audrey
 5 Godowski,Paul
 6 Gurney,Austin L.
 7 Polakis,Paul
 8 Williams,P.Mickey
 9 Wood,William I.
 10 Wu,Thomas D.
 11 Zhang,Zemin
 13 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS AND
 14 TREATMENT OF TUMOR
 16 <130> FILE REFERENCE: P5009R1

C--> 18 <140> CURRENT APPLICATION NUMBER: US/09/938,418
 C--> 18 <141> CURRENT FILING DATE: 2001-08-23

18 <150> PRIOR APPLICATION NUMBER: 60/081,071
 19 <151> PRIOR FILING DATE: 1998-04-07
 21 <150> PRIOR APPLICATION NUMBER: 60/085,697
 22 <151> PRIOR FILING DATE: 1998-05-15
 24 <150> PRIOR APPLICATION NUMBER: 60/097,022
 25 <151> PRIOR FILING DATE: 1998-08-18
 27 <150> PRIOR APPLICATION NUMBER: 60/101,922
 28 <151> PRIOR FILING DATE: 1998-09-24
 30 <150> PRIOR APPLICATION NUMBER: 60/103,679
 31 <151> PRIOR FILING DATE: 1998-10-08
 33 <150> PRIOR APPLICATION NUMBER: PCT/US99/05028
 34 <151> PRIOR FILING DATE: 1999-03-08
 36 <150> PRIOR APPLICATION NUMBER: PCT/US99/12252
 37 <151> PRIOR FILING DATE: 1999-06-02
 39 <150> PRIOR APPLICATION NUMBER: PCT/US99/20111
 40 <151> PRIOR FILING DATE: 1999-09-01
 42 <150> PRIOR APPLICATION NUMBER: PCT/US99/28565
 43 <151> PRIOR FILING DATE: 1999-12-02
 45 <150> PRIOR APPLICATION NUMBER: PCT/US00/04342
 46 <151> PRIOR FILING DATE: 2000-02-18
 48 <150> PRIOR APPLICATION NUMBER: PCT/US00/04341
 49 <151> PRIOR FILING DATE: 2000-02-18
 51 <150> PRIOR APPLICATION NUMBER: PCT/US00/05841
 52 <151> PRIOR FILING DATE: 2000-03-02
 54 <150> PRIOR APPLICATION NUMBER: PCT/US00/08439
 55 <151> PRIOR FILING DATE: 2000-03-30
 57 <150> PRIOR APPLICATION NUMBER: PCT/US00/14042
 58 <151> PRIOR FILING DATE: 2000-05-22
 60 <150> PRIOR APPLICATION NUMBER: PCT/US00/23328
 61 <151> PRIOR FILING DATE: 2000-08-24
 63 <150> PRIOR APPLICATION NUMBER: PCT/US00/32678
 64 <151> PRIOR FILING DATE: 2000-12-01
 66 <150> PRIOR APPLICATION NUMBER: PCT/US01/06520

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/938,418

DATE: 09/13/2001
TIME: 11:04:36

Input Set : A:\P5009R1_sequence_listing.wpd
Output Set: N:\CRF3\09132001\I938418.raw

67 <151> PRIOR FILING DATE: 2001-02-28
69 <150> PRIOR APPLICATION NUMBER: PCT/US01/17800
70 <151> PRIOR FILING DATE: 2001-06-01
72 <150> PRIOR APPLICATION NUMBER: PCT/US01/19692
73 <151> PRIOR FILING DATE: 2001-06-20
75 <150> PRIOR APPLICATION NUMBER: PCT/US01/21066
76 <151> PRIOR FILING DATE: 2001-06-29
78 <150> PRIOR APPLICATION NUMBER: PCT/US01/21735
79 <151> PRIOR FILING DATE: 2001-07-09
81 <160> NUMBER OF SEQ ID NOS: 10
83 <210> SEQ ID NO: 1
84 <211> LENGTH: 537
85 <212> TYPE: DNA
86 <213> ORGANISM: Homo Sapien
88 <400> SEQUENCE: 1
89 taaaacagct acaatattcc agggccagtc acttgccatt ttcataaca 50
91 gcgtagaga gaaagaactg actgaaacgt ttgagatgaa gaaaggtttc 100
93 ctcctgatca cagccatctt ggcagtggct gttgtttcc cagtctctca 150
95 agaccaggaa cgagaaaaaa gaagttatcag tgacagcgat gaatttagctt 200
97 cagggttttt tgtgtccct tacccatatac catttcgccc acttccacca 250
99 attccatttc caagatttcc atgggtttaga cgttaatttcc ctattccaat 300
101 acctgaatct gcccttacaa ctccccttcc tagcgaaaag taaacaagaa 350
103 ggataagtca cgataaacct ggtcacctga aattgaaatt gagccacttc 400
105 cttgaagaat caaaatttcc ttataaaaaa gaaaaacaaa tgtaattgaa 450
107 atagcacaca gcattctcta gtcaatatct ttagtgatct tctttataa 500
109 acatgaaagc aaagattttt gtttcttaat ttccaca 537
111 <210> SEQ ID NO: 2
112 <211> LENGTH: 1257
113 <212> TYPE: DNA
114 <213> ORGANISM: Homo Sapien
116 <400> SEQUENCE: 2
117 ggagagaggc ggcgggggtga aaggcgcatt gatgcagcct gcggcggcct 50
119 cggagcgcgg cggagccaga cgctgaccac gttcctctcc tcggtctcct 100
121 ccgcctccag ctccgcgtg cccggcagcc gggagccatg cgaccccagg 150
123 gccccgcccgc ctccccgcag cggctccgcg gcctcctgct gtcctgctg 200
125 ctgcagctgc ccgcgcgcgc gagcgcctct gagatcccc aaaaaaagca 250
127 aaaggcgcag ctccggcaga gggaggttgtt ggacctgtat aatggaatgt 300
129 gcttacaagg gccagcagga gtgcctggc gagacgggag ccctggggcc 350
131 aatgttattc cgggtacacc tggatccca ggtcggtat gattcaaagg 400
133 agaaaaggaa gaatgtctga gggaaagctt tgaggagtc tggacaccca 450
135 actacaagca gtgtcatgg agttcatga attatggcat agatctgg 500
137 aaaattgcgg agtgtacatt tacaatggatg cgtccaaata gtgctctaag 550
139 agtttggatc agtggctcac ttccgtttaaa atgcagaaat gcatgctgtc 600
141 agcgttggta ttccacattc aatggagctg aatgttcagg acctcttccc 650
143 attgaagcta taatttattt ggaccaagga agccctgaaa tgaattcaac 700
145 aattaatatt catgcactt cttctgttggaa aggactttgtt gaaggaattt 750
147 gtgctggatt agtggatgtt gctatctggg ttggcacttg ttcagattac 800
149 cccaaaaggag atgcttctac tggatgaaat tcagtttctc gcatcattat 850
151 tgaagaacta cccaaaataaa tgctttaatt ttcattttct acctctttt 900

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/938,418

DATE: 09/13/2001
TIME: 11:04:36

Input Set : A:\P5009R1_sequence_listing.wpd
Output Set: N:\CRF3\09132001\I938418.raw

```

153 ttattatgcc ttgaaatggt tcacttaaat gacattttaa ataagtttat 950
155 gtatacatct gaatgaaaag caaagctaaa tatgtttaca gaccggcgtg 1000
157 tgatttcaca ctgttttaa atcttagcatt attcattttt cttcaatcaa 1050
159 aagtggtttc aatatttttt ttagttgtt agaatacttt cttcatagtc 1100
161 acattctctc aacctataat ttgaaatatt gtttgtgtct tttgttttt 1150
163 ctcttagtat agcattttta aaaaaatata aaagctacca atctttgtac 1200
165 aatttgtaaa tgttaagaat ttttttata tctgttaaat aaaaattatt 1250
167 tccaaaca 1257
169 <210> SEQ ID NO: 3
170 <211> LENGTH: 1847
171 <212> TYPE: DNA
172 <213> ORGANISM: Homo Sapien
174 <400> SEQUENCE: 3
175 gccaggggaa gaggtgtatc cgaccgggg aaggtcgctg ggcaggcga 50
177 gttggaaag cggcagcccc cggccccc gcagccccctt ctccctcttt 100
179 ctcccacgtc ctatctgcct ctcgctggag gccaggccgt gcagcatcga 150
181 agacaggagg aactggagcc tcattggccg gcccggggcg ccggccctcg 200
183 gcttaaatag gagctccggg ctctggctgg gaccggaccc ctggccggcg 250
185 cgctcccgct gctccctgccc ggtgtatgaa aaccccgagcc cggccggccgc 300
187 cctggcaag gccctctgcg ctctccctctt ggcactctc ggccggcccg 350
189 gccagcctct tgggggagag tccatctgtt ccggcagagc cccggccaaa 400
191 tacagcatca cttcacggg caagtggagc cagacggcct tccccaaagca 450
193 gtacccctg ttccggccccc ctgcgcagtg gtcttcgctg ctggggcccg 500
195 cgcatagctc cgactacagc atgtggagga agaaccagta cgtcagtaac 550
197 gggctgcgcg actttgcggc gcgcggcgag gcctgggcgc tggatgaagga 600
199 gatcgaggcg gcgggggagg cgctgcagag cgtgcacgag gtgtttcg 650
201 cggccgcgtt ccccaagcggc accggggcaga cgtcggcgga gctggagggt 700
203 cagcgcaggc actcgttgtt ctgcgttgtt gtgcgcatcg tgcccaagccc 750
205 cgactggttc tggggcgtgg acagcctggc cctgtgcgcac ggggaccgtt 800
207 ggccggaaaca ggcggcgctg gacctgtacc cctacgacgc cgggacggac 850
209 agcggcttca cttctctc ccccaacttc gccaccatcc cgcaggacac 900
211 ggtgaccgag ataacgttct cctctcccg ccacccggcc aactccctct 950
213 actacccgcg gctgaaggcc ctgcctccca tcggccagggt gacactgctg 1000
215 cggctgcgac agagccccag ggccttcattc cttccggccc cagtcctgcc 1050
217 cagcaggagc aatgagattt tagacagcgc ctcaagtccca gaaacggccgc 1100
219 tggactgcga ggtctccctg tggctgtctt gggactgtg cggaggccac 1150
221 tgggggagggc tcgggaccaa gagcaggact cgctacgtcc gggccagcc 1200
223 cggcaacaac gggagccccct gccccggact cgaagaagag gctgagtgcg 1250
225 tccctgataa ctgcgtctaa gaccagagcc cccgagcccc tggggccccc 1300
227 cggagccatg ggggtgtcggg ggctcctgtg caggctcatg ctgcaggcgg 1350
229 ccgaggggac agggggtttc ggcgtgcgtc tgaccggcgtt gaggccgcgc 1400
231 cgaccatctc tgcactgaag ggcctctgg tggccggcac gggcattggg 1450
233 aaacagcctc ctccttccc aaccttgctt cttagggggcc cccgtgtccc 1500
235 gtctgctctc agcctcctcc tcctgcagga taaagtcatc cccaaggctc 1550
237 cagctactct aaattatgtc tccttataag ttattgtgc tccaggagat 1600
239 tggcttccat cgtccagggg cctggctccc acgtgggtgc agataaccta 1650
241 gacctgggtc tctaggctgt gctgagccca ctctcccgag ggcgcaccca 1700
243 agcggggggcc acttggaaag tgaataaaatg gggcggttcc ggaagcgtca 1750
245 gtgtttccat gttatggatc tctctgcgtt tgaataaaaga ctatctctgt 1800

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/938,418

DATE: 09/13/2001
TIME: 11:04:36

Input Set : A:\P5009R1_sequence_listing.wpd
Output Set: N:\CRF3\09132001\I938418.raw

247 tgctcacaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaa 1847
249 <210> SEQ ID NO: 4
250 <211> LENGTH: 4040
251 <212> TYPE: DNA
252 <213> ORGANISM: Homo Sapien
254 <400> SEQUENCE: 4
255 gaggaaccta ccggtaaccgg ccgcgcgctg gtagtcgccc gtgtggctgc 50
257 acctcaccaa tcccggtgcgc cgccgctggg ccgtcggaga gtgcgtgtgc 100
259 ttctctcctg cacgcgggtgc ttgggctcgg ccaggcgggg tccgcccaca 150
261 gggtttgagg atgggggagt agctacagga agcgaccccg cgatggcaag 200
263 gtatattttt gtggaatgaa aaggaagtat tagaaatgag ctgaagacca 250
265 ttcacagatt aatattttt gggacagatt tgtgatgctt gattcacccct 300
267 tgaagtaatg tagacagaag ttctcaaatt tgcataattac atcaactgga 350
269 accagcagtg aatctaattg ttcaactaaa tcagaacttg cataagaaag 400
271 agaatgggag tctggttaaa taaagatgac tatatcagag acttggaaaag 450
273 gatcatttc tgtttctga tagtgtatata ggcattttt gtgggcacag 500
275 atcaggattt ttacagttt cttggagtgt ccaaaactgc aagcagtaga 550
277 gaaataagac aagctttcaa gaaattggca ttgaagttac atcctgataa 600
279 aaacccgaat aacccaaatg cacatggcga ttttttaaaa ataaatagag 650
281 catatgaagt actcaaagat gaagatctac ggaaaaaagta tgacaatata 700
283 ggagaaaaagg gacttgagga taatcaaggt ggcagttatg aaagctggaa 750
285 ctattatcgt tatgattttt gtatttatga tgatgatcct gaaatcataa 800
287 cattggaaag aagagaattt gatgctgctg ttaattctgg agaactgtgg 850
289 tttgtaaatt ttactcccc aggctgttca cactgccatg atttagctcc 900
291 cacatggaga gactttgcta aagaagtggta tgggttactt cgaattggag 950
293 ctgttaactg tggtgatgat agaatgctt gccgaatgaa aggagtcaac 1000
295 agctatccca gtctttcat tttcggctt ggaatggccc cagtgaataa 1050
297 tcatggagac agatcaaagg agagtttagt gagtttgca atgcagcatg 1100
299 ttagaagtac agtgacagaa ctttggacag gaaattttgt caactccata 1150
301 caaactgott ttgtgtctgg tattggctgg ctgatcactt tttgttcaaa 1200
303 aggaggagat tgtttgactt cacagacacg actcaggctt agtggcatgt 1250
305 tgtttctcaa ctcattggat gctaaagaaa tatatttggta agtaatacat 1300
307 aatcttccag atttgaact actttcggca aacacactag aggatcgaaa 1350
309 ggctcatcat cggtggctgt tatttttca ttttggaaaa aatgaaaatt 1400
311 caaatgatcc tgagctgaaa aaactaaaaa ctctacttaa aaatgatcat 1450
313 attcaagtttgcaggtttga ctgttccctt gcaccagaca tctgttagaa 1500
315 tctgtatgtt ttccagccgt ctctagcagt atttaaagga caaggaacca 1550
317 aagaatatga aattcatcat ggaaagaaga ttotatatga tataacttgcc 1600
319 tttgccaaag aaagtgtgaa ttctcatgtt accacgctt gacccaaaa 1650
321 ttttcctgcc aatgacaaag aaccatggct tggatttc tttgccccct 1700
323 ggtgtccacc atgtcgagct ttactaccag agttacgaag agcatcaaata 1750
325 cttctttatg gtcagcttaa gtttggtaca ctagattgtt cagttcatga 1800
327 gggactctgt aacatgtata acattcaggc ttatccaaca acagtggat 1850
329 tcaaccagtc caacattcat gagttatgaa gacatcactc tgctgaacaa 1900
331 atcttggagt tcatacggaa tcttatgaaat ccttcagtttgg tctcccttac 1950
333 acccaccacc ttcaacgaac tagttacaca aagaaaacac aacgaagtct 2000
335 ggatggttga tttcttattct ccgtgggtgc atccttgcca agtcttaatg 2050
337 ccagaatgga aaagaatggc ccggacatttactggactga tcaacgtggg 2100
339 cagtagat tgccaaacagt atcattttt ttgtgcccac 2150

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/938,418

DATE: 09/13/2001
TIME: 11:04:36

Input Set : A:\P5009R1_sequence_listing.wpd
Output Set: N:\CRF3\09132001\I938418.raw

341 aaagataaccc tgagataaga tttttcccc caaaatcaa taaagcttat 2200
343 cagtatcaca gttacaatgg ttggaatagg gatgcttatt ccctgagaat 2250
345 ctgggtctta ggattttac ctcaagtatc cacagatcta acacccctcaga 2300
347 cttcagtgaa aaaagttcta caagggaaaa atcattgggt gattgatttc 2350
349 tatgctccctt ggtgtggacc ttgccagaat tttgctccag aatttgagct 2400
351 cttggcttagg atgattaaag gaaaagtgaa agctggaaaa gtagactgtc 2450
353 aggcttatgc tcagacatgc cagaaaagctg ggatcaggc ctatccaact 2500
355 gttaaagttt atttctacga aagagcaag agaaatttc aagaagagca 2550
357 gataaaatacc agagatgcaa aagcaatcg tgccttaata agtgaaaaat 2600
359 tggaaactct ccgaaatcaa ggcaagagga ataaggatga actttgataa 2650
361 tggtaagat gaagaaaaag tttaaaagaa attctgacag atgacatcag 2700
363 aagacaccta tttagaatgt tacatttatg atggaaatga atgaacatta 2750
365 tcttagactt gcagggtac tgccagaatt atctacagca ctgggttaaa 2800
367 agaagggtct gcaaacttt tctgtaaagg gcccgttat aaatattta 2850
369 gactttgcag gctataatat atggttcaca catgagaaca agaatagagt 2900
371 catcatgtat tctttgttat ttgctttaa caacctttaa aaaatattaa 2950
373 aacgattttt agctcagagc catacaaaag taggctggat tcagtcatg 3000
375 gaccatagat tgctgtcccc ctcgacggac ttataatgtt tcaggtggct 3050
377 ggcttgaaca tgagtctgct gtgctatcta cataaatgtc taagttgtat 3100
379 aaagtccact ttcccttcac gttttttggc tgacctgaaa agaggttaact 3150
381 tagtttttgg tcacttggc tcctaaaaat gctatcccta accatatatt 3200
383 tatatttcgt tttaaaaaca cccatgatgt ggcacagtaa acaaaccctg 3250
385 ttatgctgta ttattatgag gagatttttc attgttttct ttccttctca 3300
387 aagggtgaaa aaatgctttt aatttttcac agccgagaaaa cagtcagca 3350
389 gtatatgtgc acacagtaag tacacaaaatt tgagcaacag taagtgcaca 3400
391 aattctgtat tttgctgtat catccaggaa aacctgaggg aaaaaaatta 3450
393 tagcaattaa ctggcattt tagagtatcc taaatatgtt atcaagtatt 3500
395 tagagttcta tattttaaag atatatgtgt tcatgtattt tctgaaattt 3550
397 ctttcataga aattttccca ctgatagttt atttttgagg catctaata 3600
399 ttacatattt gccttctgaa ctttggttt acctgtatcc ttatttaca 3650
401 ttgggtttt ctttcatatgt tttgggtttt cactcctgtc cagtctattt 3700
403 attattcaaa tagaaaaat tactttacag gttgttttac tttttttttt 3750
405 aatgatactg tagtatttcc agttactagt ttactgtcag agggctgcct 3800
407 ttttcagata aataattgaca taataactga agtattttt ataagaaaat 3850
409 caagtatata aatcttagaa agggattttcc tagtttctgt gttgtttt 3900
411 ctcaaagaat cacaatttg tcagtaacat gtagttgttt agttataatt 3950
413 cagagtgtac agaatggtaa aaattccaaat cagtcaaaag aggtcaatga 4000
415 attaaaaggc ttgcaactt ttcaaaaaaa aaaaaaaaaa 4040
417 <210> SEQ ID NO: 5
418 <211> LENGTH: 1915
419 <212> TYPE: DNA
420 <213> ORGANISM: Homo Sapien
422 <400> SEQUENCE: 5
423 ggcaacatgg ctcagcaggc ttgccccaga gccatggcaa agaatggact 50
425 tggtaatttgc atccctggta tcaccttact cctggaccag accaccagcc 100
427 acacatccag attaaaagcc aggaaggcaca gcaaacgtcg agtgagagac 150
429 aaggatggag atctgaagac tcaaattgaa aagctctgga cagaagtcaa 200
431 tgccttgaag gaaattcaag ccctgcagac agtctgtctc cgaggcacta 250
433 aagttcacaa gaaatgctac cttgcttcag aaggtttgaa gcatttccat 300

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/938,418

DATE: 09/13/2001

TIME: 11:04:37

Input Set : A:\P5009R1_sequence_listing.wpd
Output Set: N:\CRF3\09132001\I938418.raw

L:18 M:270 C: Current Application Number differs, Replaced Current Application No
L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date